## Project / Executive Summary:

Technical	Business	Schedule
Yellow (S)	Green (S)	Green (S)

I = Improving D = Deteriorating S = Stable

#### **Technical:**

- Saber delivered a new version of the Performance & Security (P&S) deliverable in March. The SCORE IV&V has recommended rejection of the document due to a number of significant findings. Key issues are the suggested number of database images (2-3% of production) in the test database, test documentation, and Security Test specifics. The document is much improved over the previous versions, but falls short in the areas mentioned above. The SCORE IV&V will continue to work with the State and Saber to help finds ways to mitigate the known issues. The independent performance testing firm (i-Beta) should be used to address any gaps in the internal (Saber) testing.
- Saber has reported that when they attempted to install additional memory in the eight (8) production database servers they were unable to due to limitations in the server's capacity. It was discovered that the servers do not have any available slots with the current CPU configuration. This is a significant problem. Additional memory was being installed to address limitations in the connection pool (simultaneous database access threads) and for caching the SCORE database to address potential performance issues. Subsequently Saber provided a position paper where they documented their position, that the current configuration will address the required memory by utilizing the Oracle RAC Cache Fusion product. This solution would only address the memory cache needs for one environment, production. limitation would make conducting Mock Elections and Performance testing difficult as any shift in cache memory would affect the production environment performance. The SCORE IV&V believe there is sufficient project documentation to require that Saber purchase or upgrade the servers at their expense and as soon as possible. The SCORE Steering Committee recommended approval of the hardware / software (Oracle Licenses). The question of cost responsibility will be discussed after the completion of the Performance & Security Tests and Mock Election. Saber began installing the new hardware over the weekend of April 5th. Saber is working on securing the additional Oracle licenses required.
- Saber initially disclosed that the replication services will be down for approximately two weeks during the Data Center move. Subsequently Saber updated the estimate to a total of seven days. Contingency plans need to be discussed for the week period to explore possible risk mitigation strategies for the period including moving the Data Guard sever separately to provide a secondary site for the data. Saber has agreed to provide a work breakdown structure along with contingency plans. The walkthrough of the Via West Champa facility was completed. A walk through of an alternate ViaWest, Cornell Center, was scheduled for Friday February 29<sup>th</sup>. The SCORE IV&V Infrastructure and Security SME attended both walkthroughs. Saber, with some additional planning and coordination has been able to limit the amount of time the replication server will be off-line to a weekend. Once the new site has been stood



- back up, the replication synchronization could take up to a week. The current schedule for moving the data center start on May 8<sup>th</sup> and is completed on May 15<sup>th</sup>, with replication only down during the physical move on the weekend of May 10<sup>th</sup>.
- Saber brought both sites on-line using the Citrix Software Access Solution over the period. Both sites will be kept on-line until the planned Performance & Security Tests starting in the next period. Several SSL error occurred after bringing the secondary site on-line. The issues were documented through Spirit tickets and appear to be isolated incidents.
- The SCORE IV&V has begun planning for the next round of Independent Security Testing. It was agreed during a meeting over the period that the test needed to be conducted on the physically separated infrastructure. For this reason the independent test will be conducted in the mid May timeframe with coordination around the i-Beta testing scheduled for the same period. The SCORE IV&V expects to see improvements made to the infrastructure from the previous testing and that the logs with the supporting information has been cleaned up as needed to provide critical information to Saber and the State as to how the infrastructure is performing and to maintain focus on the security of the system.
- The project continues to struggle with network latency issues. The problem although more concentrated in smaller or rural counties has at times affected even the largest counties. Saber has recently implemented a script for capturing both client and server information immediately following a problem. The SCORE IV&V has not seen any information or feedback as to whether the information has isolated any problems. The proposed OIT / EDS / Saber Network SWOT team will be able to add value immediately by attacking some of these issues. The State is working with all parties to address the issue.
- As requested, Saber has delivered an Indicative monitoring tool distribution report for the current installation scheme along with a plan for adding additional licenses. The request for the information was made after critical network data was not available through the current monitoring data points. Saber is requesting a total of 5378 additional licenses be procured. Discussions with Saber and the State have answered many of the outstanding questions on the drastic increase in the Indicative licenses. A decision needs to be made by the State as the tool is required for the Performance and Security testing to be conducted in April.

## **Business:**

- The rollout of the remaining three counties was completed over the period. The completion is a significant milestone for the project and should be celebrated at least briefly. The project team recognizes the events and issues that still need to be addressed over the course of the next nine months in preparation for the November 2008 election. A shift in the priority to Performance & Security and Mock Election testing will be the focus for the next two months.
- The North Highland company has begun implementing some of the suggested changes from the OIT report. The final report documented a number of issues that were being addressed by the project team, but also has identified some areas that do require improvement. Organizational Change Management, Mock Election Manager and Network SWOT team are all recommendations that could add immediate value to the project. Over the period, North Highland has continued their Organizational



- Change Management changes, and has announced a new project / program structure. The changes will be implemented over the course of the next 60 days. The SCORE IV&V does not anticipate any dramatic changes to their role on the project / program.
- The potential change in direction from the current Voting legislation could have a significant impact to the project. The SCORE IV&V with the State completed a review of all the outstanding SPIRIT issues in preparation for the Mock Election release in February. The priority of the issues was based on the current backlog. If the pending legislation significantly changes the current Election Laws, all of these priorities would need to be revisited.
- The Group 6 training session 3 and Pilot refresher were completed over the period. Many of the training resources will be shifted to the Field Support area. The trainers did an excellent job in completing the training according to the established schedule. The knowledge and relationship gained during the training will help jump start the Field Support program.
- Statistics on the Group 1-4 counties access to the SCORE system are improved from the initial set of data. The transactions counts are showing appropriate activity including the initial county catch-up. A standard weekly report needs to be established for both the transactions and login (Active Directory) to make sure all counties are participating at the appropriate levels.
- County participation in the SCORE software testing continues to decline due to competing priorities. The 3.5 release date was extended for a week to allow counties more time to test due to Pilot Refresher training during one of the three weeks allocated to testing. If the trend continues for 3.5 release, additional counties may need to be involved in the process. Initial results only have five of the nine counties participating in the 3.5 testing.
- The CDOS Elections Director has established the SCORE Task Force to address and set the priority of the issues and enhancements being developed. The SCORE IV&V is being included in the task force. The SCORE IV&V's role will be limited to advisory and restricted by the contractual priorities of the project. The SCORE IV&V will continue to attend meetings as the topics dictate. The SCORE IV&V PM will attend task force meeting as topics and time permits. The STF or a similar SME needs to maintain their review of the outstanding Sprit tickets. The focus to this point has been on the backlog of UAT items, which should be completed with the P4.0 list.

## **Schedule:**

- Plans for Performance & Security testing along with the Mock Election are all competing for the SCORE infrastructure and supporting resources. The project team is meeting multiple times each week to plan and schedule the critical project milestones. Adding to the complexity of the schedule are the data center move, and independent Performance & Security Testing that are required. The independent tasks have been shifted to the mid May timeframe to allow the primary testing to be completed and to validate the work that has been done by Saber.
- The scope of the 4.0 needs to be finalized immediately in order to allow Saber sufficient time to develop and test the proposed changes. The scope should only include those items necessary to support the November 2008 election. The SCORE IV&V is assisting the State in finalizing the scope. The SCORE IV&V continues to



- support the project and the State by leading the testing efforts associated with each release. This will continue through the November 2008 election.
- Due to the delay in the Votec extract changes, most if not all the counties will be required to make manual changes to their data once on the SCORE system. Saber has indicated they can do some scripted migration work on changes that affect single voters, but those issues affecting multiple voters i.e. address library would need to be done manually. The impact of this has not been accessed. The Votec pilot counties need to be queried as to the time taken to make these changes and any lessons learned or potential automation of the process needs to be explored. Votec delivered sample extracts of the information requested. Saber is working with Douglas County to validate the data. A complete list of Votec Data Migration Issues needs to be generated and maintained in order to understand the impact if the data is not made available.

## Accomplishments:

- The SCORE IV&V began testing the Priority 3.5 release issues. A total of 121 have Passed, 34 have Failed leaving 73 remaining to Test. The testing will continue for the next week. Saber is planning weekly emergency releases to address the failed issues that are required for the Mock Election. All the items were completed over the period with the help of the additional testing resources.
- The SCORE IV&V created an resource assignment plan for the Priority 3.5 issues. The assignments cover both the State and IV&V personnel that will be utilized during the testing period. The issue count for each resource came out to be 54+, which is similar to the load for each county. State participation levels were not as expected forcing the team to implement a graded approach. This issue needs to be addressed with the P4.0 release in order to achieve the transition goals established by the SCORE IV&V contract.
- The SCORE IV&V continued to perform Acceptance Testing over the period. The new goal is to complete the entire 1540 test cases by the completion of the Statewide rollout (August 2008 Primary). This will allow Saber enough time to address the issues through emergency releases. The HAVA compliance has risen to 80%. Provisional ballots are the only component not tested to this point and is targeted for the P4.0 release. Testing will continue with each release of the application. There are 2 issues related to HAVA compliance: Agency interface implementation for state and Provisional Ballots.
- The SCORE II PMO and IV&V continue to review and respond to multiple Saber Plans and deliverables. The SCORE IV&V has shifted two of its Quality Assurance and Voter Registration / Election Management subject matter experts to performing Acceptance Testing and finalizing the User Acceptance Testing support for the Priority #3.5 issues. In addition, the Security and Infrastructure resources are being re-directed toward the Independent Security Testing findings follow-up. This movement supports the Graded Approach scheme with emphasis toward product or application not paper deliverables.

### Management Attention:

None in the period



## Information:

- The SCORE IV&V added an additional tester (Christi Granato)) to the team to support the 3.5 Mock Election release. The plan currently is to utilize the resource through the months of March and April. The period may be extended depending on the software release schedule. The resource contributed significantly to the P3.5 release testing and will be used to address any emergency releases planned for the April timeframe.
- The SCORE IV&V successfully installed the latest source code release on the Escrow server. The release was smoke tested and can be used to verify source code changes. The process continues to have issues with the database installation that require manual intervention to the provided scripts. The latest disk included the Vote Center and updated database modules as expected. The updates were installed. The Escrow process has been completed. A final test of the application and database is scheduled for mid April after the P3.5 / Emergency release testing.
- The SCORE IV&V has recommended that the existing CDOR file be used and a filter mechanism be added to eliminate the duplicates. Going back to CDOR at this point would potentially delay the interface beyond the end of the Statewide rollout period.
- The SCORE IV&V has discovered in testing that the CDOR file carries null values for the SSAC field. Currently the file creates an exception in the error log file, but does not display in the CDOR Voter Registration table. The county would need to wait for the paper.
- The Saber Data Migration process calls for fields that do not comply with database and business rules to be changed during the migration process. Those changes are not currently being documented inside the legacy system. The SCORE IV&V recommends that whenever a data field is changed in the data migration process that an activity record be generated describing the change and the timing of the change. This information has been verified and will be removed. It is not clear when the information will be loaded during the Statewide rollout waves. This will be tracked as an issue until the data is loaded for the remainder of the counties.
- The SCORE IV&V continues to monitor outside influences including the status of other states HAVA implementation. The information is used to assess the SCORE II project. The next meeting of the SCORE IV&V Executive Steering Committee has been scheduled for 4/15/2008.
- The SCORE IV&V is addressing the weekly code drops in between major release code drops. This is unplanned testing which was not part of the original scope of work. The State should reevaluate the use of an automated tool for testing.
- The SCORE IV&V continues to request the configurations settings IDS/IPS and updated switches/routers and firewall. The information was requested as part of the initial Internal Security Testing.
- During the previous Code review audit a large amount of "unused" code was identified in the customized Colorado code. It was agreed at the time that the code would not be removed until after the 3.0 Priority release of the application. Saber indicated in the last status meeting that they do not recommend cleaning up the code until the Version 5.0. The SCORE IV&V & PMO agree with this decision.



## Schedule / Activities & Tasks:

Completed & Planned Activities / Tasks									
Completed Last Week									
Activity / Task	Date	Priority							
SCORE IV&V Contract Extension Follow-up Actions	3/24/2008	High							
Ask Saber Conference Call	3/25/2008	High							
Mock Election Planning	3/25/2008	High							
SCORE Pilot Refresher Training / Pilot Experience Discussion	3/28/2008	High							
SCORE Group 6 Session 3 Training Observation / Participation	3/28/2008	High							
SCORE IV&V Audits (Licenses, Performance, Code Review)	3/28/2008	High							
Continue to respond to Saber Deliverables and Activities (DED's)	3/28/2008	High							
SCORE Group 6 Session 1 Training Observation / Participation	3/28/2008	High							
Plan for Next Week									
Activity / Task	Date	Priority							
Ask Saber Conference Call	4/8/2008	High							
SCORE Change Control Board Meeting	4/8/2008	High							
P3.5 / Emergency Release Testing	4/11/2008	High							
Mock Election Planning	4/11/2008	High							
SCORE Independent Security Test Planning	4/11/2008	High							
P4.0 Scope Definition Support	4/11/2008	High							
Continue to respond to Saber Deliverables and Activities (DED's)	4/11/2008	High							
Independent Performance Test Planning	4/11/2008	High							

Staffing: As of 01/31/2008:

Resource Type / Role	Contract Hours	Hours Used to date	% Used	Hours in Period
Project Management	2347.00	2655.50	113%	171.00
Infrastructure / Disaster Recovery SME	289.00	393.75	136%	2.00
Application / Infrastructure SME	737.00	300.25	41%	25.50
Oracle / Application SME	630.00	168.00	27%	2.00
Voter Registration / Election Management SME	1206.00	1,272.00	105%	30.00
Quality Assurance SME's	2369.00	2,559.50	108%	224.00
Security SME's	860.00	780.00	91%	1.00
Totals	8438.00	8129.00	96%	455.50

Planned Activities	Contract Hours	Hours Used to date	% Used	Hours in Period
Project Management (Status Reports / Meetings)	1599	2503.00	157%	151.00
Source Code Escrow Responsibilities	180	50.50	28%	23.50
Saber / SCORE II Deliverables / Activities Review	3599	1883.25	52%	30.00
SCORE II Independent Assessments (Security)	544	746.50	137%	0.00
SCORE II Acceptance Testing (User / System)	1940	2607.75	134%	251.00
SCORE II Project Audits	576	338.00	59%	0.00
Totals	8438	8129.00	96%	455.50



Acceptance Testing for V.1.7.0.0 & 1.7.0.1 code baseline -Test Case Execution:

Total Cases	1540	100%	HAVA Requirem	ents	Total Bugs			
Pass	732	48%	Pass	80%	Critical	0		
Fail	156	10%	Fail **	20%	High	61		
N/A	68	4%	Block	0%	Medium	50		
Block	2	0%	Total Req.	100%	Low	35		
Total Tested	958	62%			Closed	285		
Total to be Executed	581	38%			Total	431		

<sup>\*\*</sup> Provisional Ballots are still an issue with the system. Requirements have been gathered and scheduled Priority 4.0 for the Provisional Ballot Process.

Priority 3.5 Release- 225 Test Cases – 121 Pass, 34 Fail and 73 to Test

Release 1.6.0.2 -Regression P3.2 - 109 Test Cases: 99 Pass, 8 Fail and 2 N/A

Priority 3.0 Release - 168 Test Cases: 131 Pass, 15 Fail and 27 to Test

Functional Area	Total Cases	Cases Executed	Cases Passed	Perce nt Comp lete	Percent Passed
Absentee Application	55	47	39	85%	83%
Address	103	85	79	83%	93%
Administration	85	45	39	53%	87%
Ballot	61	52	34	85%	65%
Calendar	18	1	0	6%	0%
Candidate	25	13	13	52%	100%
Contacts	14	8	8	57%	100%
Contest	17	10	10	59%	100%
Districts	56	56	53	100%	95%
Document Management	7	7	7	100%	100%
Elections	169	111	95	66%	86%
Election Workers	33	20	19	61%	95%
Exports	5	4	3	80%	75%
Help	2	0	0	0%	0
Interfaces	22	7	7	32%	100%
Miscellaneous	18	15	6	83%	40%
Performance	16	9	8	56%	89%
Petition	37	20	19	54%	95%
Poll Book	28	7	7	25%	100%
Polling Places	26	10	10	38%	100%
Reports, Labels and Mailings	205	68	29	33%	43%
Scheduler	19	0	0	0%	0
Software/Hardware Compatibility	10	2	2	20%	100%
System	102	11	9	11%	82%
Voter Management	406	271	227	67%	84%



# Period Covered 03/23/2008 to 04/05/2008

## Weekly Project Status Report

Totals:	1539	879	723	57%	82%	
Category		Tota	<u>ıl</u>	Pe	ercent	
Total Test Cases		1540	0	100%		
Pass		732		4	48%	
Fail		156		•	10%	
N/A		68			4%	
Block		2		0%		
Total Executed		958	}		62%	
Total to be Executed		581		38%		



## Vendor Initial Deliverable Metrics:

Name	Deliverable	Deliverable Dates					Findings Status				
Agency Interface Plan  1023/2006  111/2006  112/2006  112/2006  110/2007  110/2006  110/2006  110/2007  110/2006  110/2006  110/2007  110/2007  11	Name		DED	Draft	Final	High	Major	Moderate	Low	Observation	Status
Organizational Change Management Plan  1023/2006   1/18/2006   1/18/2006   0   0   6   2   2   Project Web-Site   10/23/2006   1/18/2006   1/18/2007   1/22/2006   0   0   6   3   0   Project Web-Site   1/18/2006   1/18/2006   1/18/2007   1/22/2006   0   0   6   3   0   Project Mes-Site   1/18/2006   1/18/2006   1/18/2007   1/22/2007   0   11   4   4   1   Project Mes-Site   1/18/2006   1/18/2006   1/28/2007   1/26/2007   0   11   4   4   4   1   Project Mes-Site   1/18/2006   1/18/2006   1/28/2007   1/26/2006   0   0   0   0   Project Mes-Site   1/18/2006   1/18/2006   1/28/2007   1/26/2007   4   2   27   9   0   Project Mes-Site   1/18/2006   1/18/2007   1/26/2007   4   2   27   9   0   Project Mes-Site   1/18/2006   1/18/2007   1/26/2007   4   2   27   9   0   Project Mes-Site   1/18/2006   1/18/2007   1/26/2007   4   2   27   9   0   Project Mes-Site   1/18/2006   1/18/2007   1/26/2007   4   2   27   9   0   Project Mes-Site   1/18/2006   1/18/2007   1/26/2007   4   2   27   9   0   Project Mes-Site   1/18/2006   1/18/2007   1/26/2007   4   2   2   2   1   Project Mes-Site   1/18/2006   1/18/2007   1/26/2007   1   1   1   1   1   1   1   1   1											
Project Web-Site											
System Feet Plans 118/2006 11/18/2006 11/18/2006 15 10 36 33 19 Comercian Plan 118/2006 11/18/2006 11/18/2007 12/18/2007 15 10 36 33 19 Comercian Plan 118/2006 11/18/2006 11/18/2007 15 10 36 33 19 Comercian Plan 118/2006 11/18/2006 11/18/2007 18/2007 4 2 27 9 9 9 Comercian Plan 118/2006 11/18/2006 11/18/2007 4 2 27 9 9 9 Comercian Plan 118/2006 11/18/2006 11/18/2007 2 15 25 20 45 Security Plan 118/2006 11/18/2006 11/18/2007 2 15 25 20 45 Comercian Plan 118/2006 11/18/2006 11/18/2007 2 15 25 20 45 Comercian Plan 118/2006 11/18/2006 11/18/2007 2 15 25 20 45 Comercian Plan 118/2006 11/18/2006 11/18/2007 2 15 10 10 10 10 10 10 10 10 10 10 10 10 10											
System Face   Plan   118/2006   118/32006   1128/2007   128/2007   4   2   27   9   9											
Commersion Plan   Disaster Recovery Plan / Eusiness Continuity Plan   11/13/2006   11/13/2006   12/13/2007   12/13/2006   2   15   25   20   46   58   58   58   59   58   58   59   59											
Disaster Recovery Flan / Business Continuity Plan   11/13/2006   10/30/2005   12/30/2007   12/27/2006   2   15   25   20   45   5   5   5   5   5   5   5   5											
Security Plan											
Training Plan  Challed Design for Colorado Customizations  1/12/72006  1/13/2006  1/13/2006  1/13/2006  1/13/2007  1/13/2007  1/13/2007  1/13/2007  1/13/2007  1/13/2007  1/13/2007  1/13/2007  1/13/2007  1/13/2007  1/13/2007  1/13/2007  1/13/2007  1/13/2007  1/13/2007  1/13/2008  1/13/2008  1/13/2008  1/13/2008  1/13/2008  1/13/2008  1/13/2008  1/13/2008  1/13/2009  1/13/2											
Detailed Design for Colorado Customizations   12/4/2008   11/13/2008   27/2007   3   6   32   12   0   1   1   1   1   1   1   1   1   1											
Implementation Plan											
Technical Architecture Design											
Pilot Test Plan											
System Assistability Plan											
Application Requirements   12/2/2006   11/17/2008   2/2/2007   2/15/2007   0   3   7   3   2   Conversion Detail Design   2/2/2007   1/30/2008   3/26/2007   3/26/2007   0   0   1   Prepare Pitot Counties   3/2/2007   1/31/2007   1/31/2007   1/31/2007   1/31/2007   0   0   0   System Test   3/30/2007   1/11/2008   4/12/2007   6/32/2007   0   1   0   0   Undafad Detailed Design for Colorado Interfaces   3/30/2007   1/15/2007											
Conversion Detail Design   29/2007   1/13/2006   3/26/2007   5/26/2007   0   0   1   3   0   1											
Prepare Pilot Counties	Application Requirements	12/22/2006	11/17/2006	2/2/2007	2/15/2007	0			3	2	
System Test   3/30/2007   11/17/2006   6/3/2007   0   1   0   0   0   0   0   0   0   0											
System Test											
Updated Detailed Design for Colorado Interfaces   3/30/2007   1/26/2007   21/26/2007   37/20007   0   8   12   3   2   1/204340   1/204200	Configure Software										
Updated Test Plan	System Test	3/30/2007	11/13/2006	5/3/2007	7/19/2007	1	9	1	0	0	
Integrated Development Environment	Updated Detailed Design for Colorado Interfaces	3/30/2007	1/25/2007	2/15/2007	3/7/2007	0	8	12	3	2	
Source Code	Updated Test Plan	3/30/2007	2/2/2007	3/22/2007	4/10/2007	1	16	14	1	4	
Duplicate Voter Check Criteria   TBD	Integrated Development Environment	10/23/2006	11/3/2006	1/16/2007	1/30/2007	0	0	3	1	2	
Pilot Data Migration	Source Code	10/23/2006	11/7/2006	1/16/2007	1/3/2007	0	0	0	0	0	
UAT / Planning & Testing	Duplicate Voter Check Criteria	TBD	12/5/2006	12/19/2006	2/23/2007	0	0	3	3	0	
UAT / Pilot Training	Pilot Data Migration	4/20/2007	2/20/2007	5/15/2007	6/1/2007	0	1	7	0	0	
Performance & Security Test	UAT Planning & Testing	3/27/2007	4/3/2007	5/4/2007	6/6/2007	0	2	7	4	0	
Installation and Configuration Guide	UAT / Pilot Training	4/20/2007	3/26/2007	7/10/2007	7/23/2007	0	0	0	0	0	
Installation and Configuration Guide			2/8/2007			6	27	9	2	1	
User Acceptance Test Plan	Installation and Configuration Guide	2/1/2007	2/8/2007	5/31/2007	6/19/2007	2	6	8	1	1	
Duplicate Voter Check		3/7/2007	3/14/2007	6/28/2007	7/9/2007	0		3	3	2	
Test Conversion	User Acceptance Test Plan	5/18/2007	7/11/2007	8/17/207	9/5/2007	0	0	0	0	0	
Regression & System Test / Production Build   6/15/2007   4/11/2007   8/27/2007   8/27/2007   0   3   5   1   0	Duplicate Voter Check	6/1/2007	3/19/2008	4/16/2008	4/28/2008	0	0	0	0	0	
Documentation   3/16/2007   3/23/2007   6/22/2007   6/27/2007   0   5   6   19   0	Test Conversion	6/1/2007	6/13/2007	8/8/2007	8/30/2007	0	4	3	0	0	
Documentation   3/16/2007   3/23/2007   6/22/2007   6/27/2007   0   5   6   19   0	Regression & System Test / Production Build	6/15/2007	4/11/2007	8/15/2007	8/27/2007	0	3	5	1	0	
Train Pilot Users		3/16/2007	3/23/2007	6/22/2007	6/27/2007	0	5	6	19	0	
SCORE II Pilot Readiness   7/21/2007   6/19/2007   8/3/2007   8/3/2007   0   5   7   2   3	Pilot Counties Data Migration	7/9/2007	6/25/2007	5/1/2007	10/2/2007	0	3	2	0	0	
Pliot County Survey	Train Pilot Users	7/20/2007	8/27/2007	9/14/2007	9/24/2007	0	3	2	0	1	
Data Center's GAP Analysis	SCORE II Pilot Readiness	7/21/2007	6/19/2007	8/3/2007	8/24/2007	0	5	7	2	3	
Hardware Installation - CDOS	Pilot County Survey	8/24/2007	9/19/2007	8/16/2007	11/2/2007	0	1	4	0	1	
Hardware Installation - e-Fort   3/2/2007   12/22/2006   4/9/2007   5/11/2007   0   0   6   0   1	Data Centers GAP Analysis	11/24/2006	11/14/2006	11/15/2006	12/18/2006	1	4	3	2	8	
Hardware Procurement Plan & Inventory	Hardware Installation - CDOS	12/15/2006	12/22/2006	8/6/2007	8/14/2007	0	0	0	0	0	
Hardware Procurement Plan & Inventory	Hardware Installation - e-Fort	3/2/2007	12/22/2006	4/9/2007	5/11/2007	0	0	6	0	1	
Software Inventory	Hardware Procurement Plan & Inventory	1/26/2007		11/16/2006	12/26/2006	3	3	7	0	8	
Report Status / Status Meetings		1/26/2007	11/14/2006	11/16/2006	12/26/2006	2	2	2	0	9	
Report Status / Status Meetings	County Hardware Survey	2/2/2007	1/30/2007	2/13/2007	2/28/2007	0	0	0	0	0	
Prepare Statewide Counties         11/16/2007         6/27/2007         4/17/2008         4/24/2008         0					6/30/2008	0	0	0	0	0	
Final Acceptance Testing/Mock Election         NEW         3/24/2008         5/15/2008         6/6/2008         0 <td></td> <td>11/16/2007</td> <td>6/27/2007</td> <td>4/17/2008</td> <td>4/24/2008</td> <td>0</td> <td>0</td> <td>0</td> <td>0</td> <td>0</td> <td></td>		11/16/2007	6/27/2007	4/17/2008	4/24/2008	0	0	0	0	0	
Transition Plan         12/24/2007         10/22/2007         12/12/2007         12/24/2007         2         11         8         3         0           Train End Users         3/18/2008         9/27/2007         4/10/2007         4/17/2008         0         0         0         0         0         0           Help Desk Plan         3/28/2008         6/11/2007         7/20/2007         1         7         10         1         6           Implementation Roll Out         3/28/2008         10/5/2007         3/31/2008         3/31/2008         0         0         0         0           Maintenance and Support Plan         3/29/2008         12/10/2007         3/10/2008         3/18/2008         2         21         11         18         23           SCORE II Readiness         3/30/2008         10/8/2007         6/2/2008         6/16/2008         0         0         0         0         0           Totals         Totals         102         313         539         266         234									0	0	
Train End Users         3/18/2008         9/27/2007         4/10/2007         4/17/2008         0								8	3	0	
Help Desk Plan   3/28/2008   6/11/2007   7/20/2007   7/30/2007   1   7   10   1   6   6   6   6   6   6   6   6   6									0		
Implementation Roll Out         3/28/2008         10/5/2007         3/31/2008         3/31/2008         0											
Maintenance and Support Plan         3/29/2008         12/10/2007         3/10/2008         3/18/2008         2         21         11         18         23           SCORE II Readiness         3/30/2008         10/8/2007         6/2/2008         6/16/2008         0         0         0         0         0           Totals         102         313         539         265         234											
SCORE II Readiness         3/30/2008         10/8/2007         6/2/2008         6/16/2008         0         0         0         0         0         0           Totals         102         313         539         265         234											
Totals 102 313 539 266 234											
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	Totals		Accepted De	liverable							



## Vendor Current Deliverable Metrics:

Deliverable			ble Dates		Findings Status					Current
Name	Contract	DED	Draft	Final	High	Major	Moderate	Low	Observation	Status
Project Plan	10/23/2006	11/2/2006	12/6/2006	12/18/2006	0	0	0	0		
Agency Interface Plan	10/23/2006	11/1/2006	11/22/2006	12/13/2006	0	0	0	0		
Organizational Change Management Plan	10/23/2006	11/17/2006	2/2/2007	12/22/2006	0	0	0	0	-	
Project Web-Site	10/23/2006	11/6/2006	1/16/2007	12/22/2006	0	0	6	3	0	
System Acceptance Criteria	11/6/2006	11/13/2006	1/26/2007	1/4/2007	0	0	0	0	0	
System Test Plan	11/6/2006	11/13/2006	1/29/2007	12/15/2006	0	0	0	0	0	
Conversion Plan	11/13/2006	11/13/2006	1/26/2007	1/3/2007	0	0	0	0		
Disaster Recovery Plan / Business Continuity Plan	11/13/2006	10/30/2006	1/29/2007	12/27/2006	0	0	0	0	_	
Security Plan	11/13/2006	10/30/2006	2/12/2007	1/30/2007	0	0	0	0		
Training Plan	11/27/2006	11/5/2006	1/19/2007	12/26/2006	0	0	0	0	_	
Detailed Design for Colorado Customizations	12/4/2006	11/13/2006	2/7/2007	3/7/2007	1	6	32	12	0	
Implementation Plan	12/4/2006	11/30/2006	4/30/2007	5/22/2007	0	0	0	0	0	
Technical Architecture Design	12/8/2006	11/14/2006	11/16/2006	12/26/2006	0	0	0	0	0	
Pilot Test Plan	12/18/2006	11/17/2006	2/1/2007	1/8/2007	0	0	0	0	0	
System Availability Plan	12/19/2006	11/17/2006	1/17/2007	2/12/2007	0	0	0	0	0	
Application Requirements	12/22/2006	11/17/2006	2/2/2007	2/15/2007	0	0	0	0	0	
Conversion Detail Design	2/9/2007	11/30/2006	3/26/2007	5/22/2007	0	0	3	0	0	
Prepare Pilot Counties	3/2/2007	1/31/2007	6/13/2007	7/6/2007	0	2	0	0	1	
Configure Software	3/30/2007	11/17/2006	4/12/2007	6/29/2007	1	9	1	0	0	
System Test	3/30/2007	11/13/2006	5/3/2007	7/19/2007	0	0	0	0	0	
Updated Detailed Design for Colorado Interfaces	3/30/2007	1/25/2007	2/15/2007	3/7/2007	0	0	0	0	0	
Updated Test Plan	3/30/2007	2/2/2007	3/22/2007	4/10/2007	0	0	0	0	0	
Integrated Development Environment	10/23/2006	11/3/2006	1/16/2007	1/30/2007	0	0	0	0	0	
Source Code	10/23/2006	11/7/2006	1/16/2007	1/3/2007	0	0	0	0	0	
Duplicate Voter Check Criteria	TBD	12/5/2006	12/19/2006	2/23/2007	0	0	0	0	0	
Pilot Data Migration	4/20/2007	2/20/2007	5/15/2007	6/1/2007	0	0	3	0	0	
UAT Planning & Testing	3/27/2007	4/3/2007	5/4/2007	6/6/2007	0	2	7	4	0	
UAT / Pilot Training	4/20/2007	3/26/2007	7/10/2007	7/23/2007	0	0	0	0	0	
Performance & Security Test	5/4/2007	2/8/2007	8/30/2007	9/10/2007	6	27	9	2	1	
Installation and Configuration Guide	2/1/2007	2/8/2007	5/31/2007	6/19/2007	0	3	4	0	0	
Verify Pilot Data Migration	3/7/2007	3/14/2007	6/28/2007	7/9/2007	0	4	2	0	0	
User Acceptance Test Plan	5/18/2007	7/11/2007	8/17/207	9/5/2007	0	0	0	0	0	
Duplicate Voter Check	6/1/2007	3/19/2008	4/16/2008	4/28/2008	0	0	0	0	0	
Test Conversion	6/1/2007	6/13/2007	8/8/2007	8/30/2007	0	4	3	0	0	
Regression & System Test / Production Build	6/15/2007	4/11/2007	8/15/2007	8/27/2007	0	3	5	1	0	
Documentation	3/16/2007	3/23/2007	6/22/2007	6/27/2007	0	1	3	0	0	
Pilot Counties Data Migration	7/9/2007	6/25/2007	5/1/2007	10/2/2007	0	3	2	0	0	
Train Pilot Users	7/20/2007	8/27/2007	9/14/2007	9/24/2007	0	3	2	0	1	
SCORE II Pilot Readiness	7/21/2007	6/19/2007	8/3/2007	8/24/2007	0	5	7	2		
Pilot County Survey	8/24/2007	9/19/2007	8/16/2007	11/2/2007	0	1	4	0		
Data Centers GAP Analysis	11/24/2006	11/14/2006		12/18/2006	0	0	0	0	0	
Hardware Installation - CDOS	12/15/2006	12/22/2006	8/6/2007	8/14/2007	0	0	0	0	0	
Hardware Installation - e-Fort	3/2/2007	12/22/2006	4/9/2007	5/11/2007	0	0	6	0	1	
Hardware Procurement Plan & Inventory	1/26/2007	11/14/2006		12/26/2006	0	0	0	0		
Software Inventory	1/26/2007	11/14/2006		12/26/2006	0	0	0	0	0	
County Hardware Survey	2/2/2007	1/30/2007	2/13/2007	2/28/2007	0	0	0	0		
Report Status / Status Meetings	5/1/2007	N/A	N/A	6/30/2008	0	0	0	0	0	
Prepare Statewide Counties	11/16/2007	6/27/2007	4/17/2008	4/24/2008	ō	0	0	0	_	
Final Acceptance Testing/Mock Election	NEW	3/24/2008	5/15/2008	6/6/2008	ō	0	0	0	_	
Transition Plan	12/24/2007	10/22/2007		12/24/2007	2	11	8	3	_	
Train End Users	3/18/2008	9/27/2007	4/10/2007	4/17/2008	0	0	0	0	_	
Help Desk Plan	3/28/2008	6/11/2007	7/20/2007	7/30/2007	0	4	6	1	_	
Implementation Roll Out	3/28/2008	10/5/2007	3/31/2008	3/31/2008	0	0	0	<u>.</u>	_	
Maintenance and Support Plan	3/29/2008	12/10/2007	3/10/2008	3/18/2008	2	21	11	18	_	
SCORE II Readiness	3/30/2008	10/8/2007	6/2/2008	6/16/2008	0	0	0	0		
Totals	3,00,2000	10.072007	5,2,2000	34, 34, 2000	12	109	124	46	31	
Totals		Accepted De	l eliverable		Conditional		1 - 1	Rejected Di		
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## **Risks:**

	RISKS									
RISK ID	ENTRY DATE	UPDATE DATE	ARTIFACT	IDENTIFIED RISK	PROJECT AREA	PROBABILITY	IMPACT	EXPOSURE	MITIGATING FACTORS / ACTIONS	STATUS
IVV - 2	12/21/2005	4/4/2008		The counties decide to stay with their respective legacy systems as opposed to migrating to the State Wide Voter Registration System. Similar to the rogue county problems from other states.	Business	2	3	6	Keep the counties informed on the decisions being made on the project. Allow the counties to once again participate in the selection process. It is critical that the State continues to send a consistent message to the counties and the state of the project. 4/4/2008 - All 64 counties rolled out on SCORE. There are a few counties that will be running parallel for some period of time. Those counties could decide to move back to their legacy systems at some point. The rest of the counties continue to work on SCORE.	Open
IVV-29	11/10/2006	4/4/2008		The Saber resources are being stretched thin by the acquisition of other states, and or the process of going after additional states.	Schedule	2.	3	6	Lock down resources early. Stay informed on the other state acquisition process. The proposed phased approach of software delivery is increasing the probability of this; insk. Saber has indicated they have won Wyoming during the audit trip. Yote Center development is starting back up, competition for resources will most likely occur. Saber announced that their Colorado Functional Manager is being re-assigned to the Wyoming implementation project. Saber continues to provide the contract resources as needed for the critical phases of the project. 11/10/2007. Additional Saber resources being added to the project to support the Statewide rollout. 44/2008. The PA.O. priorities have been defined. All functionality necessary for the Mock Election has been put in place or is being addressed in an emergency release.	Closed
IVV-31	12/1/2006	3/14/2008		That the SCORE II Vote Center Application can be adequately stress tested during the UAT process. The system must be Stress tested according to industry standard in order to provide the necessary due diligence required by the counties that had issues during the last election. Saber's performance testing results do not match the expectations established as part of the Updated Test Plan deliverable. Saber has used a tool that was not part of the proof of concept documentation. In addition, a load of only 700 users were tested on a part of the infrastructure forcing the results to be extrapolated for the full 5500. Saber does not have the necessary experience with the application to make this judgment.	Technical	4	3	12	The meeting held of February 12th did not produce the desired results. Saber did not come to the meeting prepared to discuss the tools and approach as expected. The State will need to continue to put pressure on Saber to prove the 5500 user requirement. Mitigation Strategy: Independent Stress testing. The State has entered into negotiations with two companies to perform Performance Testing Plans in the Updated Test Plan deliverable. Saber will conduct a "Proof of Concept" before the "official" Performance Test. 6/2/2007. The State provided the IV&V with a copy of the two proposals for the Independent Performance Testing. 7/6/2007 - Performance and stress testing will be just in time due to product deliver, CDOS Data Center implications, and outside contract work. 8/3/2007 - Updated risk. 9/1/2007 - Saber has been asked to revisit the deliverable and perform another test. 11/03/2007 - The application has been adequately tested for the 2007 Election. 3/14/2008 - The latest P&S deliverable will force extrapolation to occur due to database size and database server memory limitations.	- Open
IVV-37	2/9/2007	6/2/2007		The SCORE IV&V could not find the info documented in the System Maintenance Guide of the DRP, Change Control Document of the DRP or the Technical Architecture Design. It is risky to assume that all Oracle or other software is fully patched. In addition, bugs or issues may occur over the duration of the project requiring patching. In each case of a patch or bug for Oracle and other software it is not clear: 1.How is a patch tested? 2. Where is a patch tested? 3. If it is tested in production, what downtime occurs? 4. How is the patch removed from production if a problem is found after its application? 5. What contingencies are made for bugs without patches? 6. Is there a policy to apply patch sets rather than one off patches whenever possible? If this information is going to be provided in the Configuration Management Plan it should be indicated.		3	3	9	The State must approve all changes to the SCORE system. Any proposed must be tested in a non-production environment. 6/2/2007 - The State needs to consider creating a "sandbox" environment for the purposes of testing SCORE infrastructure changes. This was discussed as part of the installation and configuration guide deliverable review.	Open
IVV-38	2/9/2007	4/4/2008		The Disaster Recovery Plan scenarios provided by Saber fail to address any real world disasters e.g. catastrophic damage to a data center. This should have potential real world disaster scenarios.	Technical	3	3	9	The State needs to incorporate the SCORE II project in their Disaster Recovery Planning scheme. Within the State scenarios, a complete loss of a data center should be addressed. 4/4/2008 - The project team realizes the importance of these tests and has began planning for a test to be executed before the November Election.	open



					RISKS						
RISK ID	ENTRY DATE	UPDATE DATE	ARTIFACT	IDENTIFIED RISK	PROJECT AREA	PROBABILITY	IMPACT	EXPOSUR	RE	MITIGATING FACTORS / ACTIONS	STATUS
IVV-40	2/21/2007	4/4/2008	10/6/2007	Substantial security responsibility may fall into State's realm. Adherence to security best practices consistently found to be lacking, and even the most basic hardening steps such as scan/analyze/patch iterative refinements at a subsystem level are missing. Waiting until after 3/26/07 (per Wave Plan) to begin Independent Security Testing may be too late to patch holes uncovered at the device, system and network level for critical path milestones to be achieved.	Technical	3	З	9	1	-lighly recommend appointing a State Security Officer for security officer perform', oversight, and governance duties. Independent Security Test will be used to address issues. 10/6/2007 - Based on the feedback from Saber on the IST, the number of issues that will not be implemented is minimal. 1/10/9/2007 - The initial IST tests were conducted. Follow-up continues with Saber on the Issues that are affecting the SCORE environment. 4/4/2008 - Saber began their formal security testing. Documentation has been light and imited to this point.	Open
IVV-46	7/20/2007	4/4/2008		The lack of detailed design information on the Vote Center Web Module (Database Design, Technical Architecture, Disaster Recovery) limiting the States exposure to arguably the most critical component of the SCORE system. The information is needed to accurately test the system in the area of performance, security and disaster recovery.	Technical	3	Э	9	1	Saber provide additional information and or a walkthrough of the final Architecture in lieu of the updated materials. 1/12/2008 - Saber has agreed to provide the requested Data Flow information. This will be tracked at each Saber Status meeting moving forward. 4/4/2008 - Saber and the State are both planning extensive tests of the Vote Center system.	Open
l∨√-48	9/1/2007	1/12/2008		Citrix protocol errors continue to be a problem for the pilot counties. The errors have not been isolated despite the efforts of Saber and Citrix. The problems are beginning to erode at the counties confidence in the SCORE system.	Technical	3	3	9	1	Saber and the State need to have a "Sandbox" environment that would allow he testing of configuration changes to repair the problem. The State does to have a sandbox environment that includes the SCORE infrastructure. 10/6/2007 - The counties were polled and the larger counties continue to have orbolhems despite the implemented changes: 11/03/2007 - Saber and Citrix met over the period to try to salvage the appliance Citrix Cateway before going back to the Software version. 11/24/2007 - Saber is has started conversion of Site 1 back to the Software version of the Citrix Cateway product. 12/15/2007. The last round of Citrix testing did not go as planned. These issues need to be addressed by Saber and a decision to move over to Site 1 according to the established deadlines in order to make the January deadline to be up on the full infrastructure. 1/12/2008 - Saber successfully moved back onto Site 1 utilizing the CSS. The move was not without incident due to the presence of connectivity strings in the pilot county client machines.	Open
IVV-51	11/19/2007	4/4/2008	November 2007 Election	Saber is not demonstrating the configuration management expertise that is expected to manage an enterprise architecture. The problem discovered on election day with the database setting being too low to handle the expected low is an real time example of this issue. Without some additional process and discipline the SCORE infrastructure will continue to be in question.	Technical	3	3	9		Require Saber to demonstrate the same level of configuration management discipline the SCORE infrastructure as is being applied to the SCORE application. 1/12/2008 - Connectivity strings being overlooked in the Pilot county client machines during the site swap out. 4/4/2008 - The disk space necessary to maintain the 3 required environments was exhausted over the period.	Open
IVV -52	11/19/2007	3/14/2008	ISTP	Saber is not demonstrating their ability to monitor and respond to the SCORE log files. Their lack of a qualified tool and the lack of a response to know attacks puts the SCORE infrastructure at risk.	Technical	4	3	12		Saber acquires a tool for monitoring logs and continue to develop the 'production' monitoring capabilities for the system. 3/14/2008 - SCORE sysperience a system outage due to the lapse of a Citrix software license. This is unacceptable and has added additional concern from the counties.	Open
IVV-54	1/26/2008	2/29/2008	External Influence	Potential for Department of Justice fines for action for not implementing a Statewide Voter Registration system according to the published schedule. The Governor's office over the period sent out a survey asking the counties about their SCORE expectation and experiences to this point in the project. This communication will be seen as a shift in direction at an extremely critical time (Statewide Rollout) for the project. Organizational Change Management is extremely difficult on large scale IT (Legacy) projects. This communication may have created a negative perception of the project among the counties.	Business	2	3	6	1	Discuss issues with the SCORE Project Management Office and SCORE V&V before communicating to the counties. Discuss the potential shift in schedule with the Department of Justice. 2/2/2008 - Follow-up the survey with additional clarifying information on the status of the project and specific ssues brought out in the survey.2/29/2008 - Based on the published report, he documented issues; Organizational Change Management, Mock Election Coordinator, and Network SWOT are all positives for the project. How they are implemented will be critical to the projects success.	Open
IVV-55	2/25/2008	4/4/2008	Technical Architecture	The database sewers (8 - 4 each site) are only capable of handling 8GB of memory per server. This puts the scalability of the servers in question. Additional memory can only be added with additional processors which would require the purchase of additional Oracle licenses. The memory was needed to address the necessary simultaneous connections and database caching requirements.	Technical	3	3	9	l	Purchase new servers. Move non production environments to another set of nfrastructure. 4/4/2008 - The new servers were installed over the period. No additional information was available at the time of the report.	Open
IVV-56	3/31/2008		Transition Plan, Maintenance & Support Plan, Field Support & Platinum Support Plan	The State and Saber need to come to an agreement on an acceptable maintenance contract for the SCORE system. The agreement must include SLA, outstanding implementation issues, and the presence of a field support contract that was not part of the original negotiations. The cross over between the plans is extensive and has lead to a great deal of confusion.	Business	2	3	6		Begin planning the "program" portion of the project. Take into account the outstanding project issues. Consult with other States for lessons learned in heir work with Saber post implementation.	Open
				Impa	ct						
				Probability 1 - Improbable 2 - Remote	1 - Negligib 1 2	4	3 6	4-Catastrop	hic		
				3 - Probable 4 - Expected	3 4	6 8	9 12	12 16			

